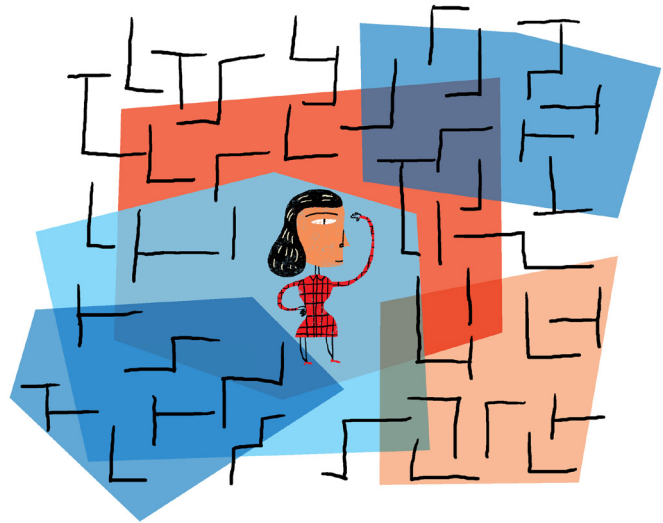# What is the Opposite of Certainty (and why does it matter)?

Exploring the connections between uncertainty, complexity, and learning.

Michael Ciszewski

INTRODUCTION

As human beings, we crave certainty. As practitioners and theorists, we have spent decades building simplifying frameworks to support us in this quest. This lineage traces back to the earliest years of the 20th century when Frederick Taylor and others were helping to create efficiency gains through scientific management, to the mid-20th century and the monumental contributions of Kurt Lewin, and it has continued in anything but a straight line to the current time through many giants in the field of applied behavioural science. These contributions have created a rich library of resources from which practitioners can choose according to their circumstances and preferences.

While these structures and methodologies have their place as foundational elements in our work, increasingly they do not serve us as well as they used to do. Contemporary thinkers in organisation development are pushing us away from linear processes and top-down approaches, towards an orientation that is emergent, unpredictable and approximate. (Marshak, 2009; Bushe and Marshak, 2014; Oswick, 2014; Stacey, 2012). This has been in response to what we have been learning about complex adaptive systems, and it has led to feelings of uncertainty on the part of both clients and practitioners, especially those accustomed to knowable stages of development (Olson and Eoyang, 2001).

In this article, I show how comfort with uncertainty is an essential component for learning and, therefore, for success when intervening in today's organisations where complexity is a feature. I begin by examining some of the characteristics of complexity that are relevant to organisations, and what these mean for

how we think about, and work with, temporal events. This leads to a theory of change, and the assessment that, in complex environments, uncertainty and learning are linked. I conclude with an exploration of the practice elements that enable effective intervention in complex systems.

Useful Definitions from the World of Complexity

According to one definition, a complex adaptive system is made up of agents. These agents, humans in an organisation for example, interact with each other and with the particular environment in which they exist. This interaction changes the environment and can lead to the agents, themselves, changing or adapting. The result is that the interaction between and among agents heavily influences the probabilities of later events, but the specific consequences of the interactions are hard to predict. (Axelrod and Cohen, 1999).

Complexity often leads to emergent properties. These are characteristics of the system that the separate parts do not have themselves. Consider the human brain as an example of this. It is a complex adaptive system made up of billions of neurons which are constantly forming patterns and pathways as they interact with each other and their environment. Individually, none of these neurons has consciousness; assemble them into a brain and this characteristic develops.

Other characteristics of complex adaptive systems are identified below (Snowden and Boone, 2007). It is not an exhaustive list, but contains attributes most relevant to organisational work:

- A complex adaptive system is highly sensitive to small changes.
- Meaning emerges through interaction. It is not necessarily predetermined or predefined.
- Non-linear relationships determine outcomes. This means hindsight does not lead to foresight.
- Seeking fail-safe plans and defined outcomes is inadequate; complex environments do not respond well to over-control or the imposition of order. It is much more useful to apply 'safe-to-fail' experimentation where the possibility of failure is supported, and productive patterns are allowed to emerge.

Complexity and our Relationship to Time

The way we think about time in organisations changes when we start to understand complex adaptive systems. Our relationship to the past and the future shifts, and our perspective on the present moment takes on a new priority. Things that happened previously and actions yet to be taken, all fade in importance when compared with what is occurring *right now.* What came before and what is yet to be realised can only be understood in relation to this moment.

The Past

So often, we can get caught in the past, spending unproductive time looking to affix blame for something that has already happened. We get mired in trying to change something about which we can do nothing, fantasising about things we should have done differently. The corollary pattern is being busy, keeping our heads down, so that we are not the one on whom the blame falls.

When something goes wrong (or right), it is natural to ask, "How did *that* happen?" While straightforward, this is not the most effective line of inquiry. This question, delivered in the moment of disappointment or surprise, creates a backward-looking orientation. It limits thinking by providing a narrow frame of reference: the attempt to determine the precise causes of the disruption.

If we are in a complex adaptive system, the disruption just experienced is unlikely to happen again in exactly the same way. This makes a backward exploration an unhelpful diversion of time and resources.

The Future

We like to spend time contemplating our future. We envision how we want it to be and then design a sequence that will engineer us to that endpoint. And then, despite the analysis, despite carefully assembled steps to get from here to there, we never seem to arrive.

Like dwelling on the past, certainty that *A will lead to B will lead to C will lead to some yet-to-be-realised future* can be misleading and unproductive. Such a stance locks us into a particular view of the future that may or may not be valid as we progress. In addition, the available choice of steps in the sequence is necessarily limited by what we currently know.

If we are in a complex adaptive system, the relationship between cause and effect will be non-linear and temporally distant, so prediction becomes impossible. As a result, being fixed about the actions that will lead to a given outcome can be an exercise in frustration.

Implications: The power of Working in the Present

None of this is an argument for disregarding the past and what it has to teach us, nor is it a repudiation of planning or of being thoughtful about the future. Planning can be useful. It is what we do with the plan as we move through time that makes the difference. Similarly, reflecting, reminiscing and recounting valuable lessons can be healthy conversations about the past. It is when we get stuck reliving former glories, obsessing about what might have been, and trying to find someone to blame for a perceived oversight that we occupy unproductive spaces.

This brings us to the significance of being in what Patricia Shaw has called "the dynamic flow of actual

experience" (2013), and what others may refer to as the 'present moment' or the 'here-and-now'. "The present moment overflows with information about ourselves and our environment. But most of those learnings fly by because we're preoccupied with our images of how we want the world to be." (Wheatley, 1999). Or how we wish it had been.

Living and working in the present is much harder than focusing on the past or the future. Being 'in the moment' demands exquisite attention, and this kind of attention can lead to being knocked off balance. Allowing goals, plans and structures to emerge by amplifying difference rather than initially seeking agreement (Olson and Eoyang, 2001) is quite a wobbly place to stand when we are accustomed to goals, plans, and structures being handed down to us, or determined in advance. Assured by the cliché that 'now is all we have', we never know what will happen next, or where the next choice will lead. It is this fundamental uncertainty that makes it so challenging. And so interesting.

Success comes not when we meet a series of one-dimensional (point-in-time) targets but rather when we achieve a degree of fit with our environment (Olson and Eoyang, 2001). Since the environment is always changing, reaching sustainability requires that we pay sufficient attention *right now* so that we are aware of these changes as they are occurring and that we adjust accordingly.

One way to regain our temporal balance is by reframing some of the questions we typically ask so that we are better equipped to stay in the present. When the temptation arises to run back to the past in an attempt to discover "How did *that* happen?", ask instead, "What do we do *now*?" When thinking about the future, it is a good idea to ask ourselves, "Where do we want to go?" and, "Who do we want to be?" But, we need to change what we do with our responses. We need to hold them lightly so we can remain curious about what is going on, and adapt to what has just happened.

Though subtle, this different orientation is significant when it comes to improving effectiveness in a complex adaptive system.

A Theory of Change

The way we have thought about change over the years has been influenced by the social and scientific thinking of the time.

- In the earliest days, when we found the environment to be relatively stable and predictable, we managed according to principles extracted from the linear cause-and-effect world of Newtonian physics and Cartesian epistemology. Kurt Lewin's unfreeze-change-refreeze methodology was born in this context, and fitted perfectly with the view of change as a planned and managed process.
- As we started to familiarise ourselves with systems thinking and large-scale change efforts, we taught ourselves to work with *transformation* - something bigger and more complicated, but still with causal chains and loops that fitted with the world as we understood it (Senge, 1990). We were moving to the edge of complexity, beginning to let go of some of our limiting assumptions, and experimenting with self-organisation and uncertainty (Anderson and Ackerman Anderson, 2001).
- Now we have quantum physics, complexity science, behavioural economics, and other disciplines that are showing us that change is *not* manageable, controllable or able to be planned. It is with us all the time as an emergent phenomenon. We have moved from a concept of change as something you *do* through planning and execution, to change as something that *is*.

Noted first by Heraclitus 2500 years ago, the river is perhaps the most apt metaphor for thinking about change. As steady and constant as the mightiest of them can seem, we can never step into the same one twice. Another illustration of this perspective is contained in the wise words of a colleague and lifelong practitioner of Qigong who likes to say, "There is no step one, step two, step three; there is only step one".[1]

When focusing on the present moment, we approach change as if we never know what will happen next. It is far more effective to decide what to do right now (step one), watch what happens, and on the basis of those results, decide what to do in that *next* 'right now' (a new step one). This is a shift from anticipation to anticipatory awareness (Snowden and Boone, 2007).

In our turbulent and socially-connected world, we have to be open, adaptable, and willing to experiment (Oswick, 2014). It is only in this place of uncertainty that learning is truly possible. The risk of trying to find blame for something that happened in the past, or of careening down a predefined path towards a certain future, is that we close ourselves to what may

be happening along the way. These stances can shut off curiosity and our ability to learn from what is happening. It is why *the opposite of certainty is learning*. If we can develop the discipline to live most of our lives in the present, and find the courage to be comfortable with all the uncertainty that this implies, we will have cultivated our ability to learn more fully.

Establishing the Conditions for Learning in Uncertainty

Fear is a typical companion in a situation where uncertainty is present. Sometimes this fear is a natural reaction to what is occurring. At other times, experience shows that it can be a tool used intentionally by managers to create the illusion of control. Such managers intimidate and instill a sense of fear in their organisations as a way to manage, reduce, or control their own fear in the face of uncertain circumstances.

Fear forces a sharp focus on stability and predictability. "Let's get back to what we know how to do," becomes the guiding principal. In a complex environment, this is not a path to innovation or sustainable success.

A better alternative is to engage the uncertainty and accompanying fear, rather than running from them or wrestling them into submission. When in a situation where the outcome is unclear, or where the guidebook does not state what to do next, possibilities emerge as a result of us being curious about what is going on and about what we are noticing. Adaptive behaviours make the most of an unprecedented situation. If the chosen action leads in a good direction, continue doing it. If it does not, adjust and try something else. Paying attention and reflecting along the way enables growth and learning.

Several practice elements can support us in successfully navigating uncertain, complex environments:

• Self awareness is essential for all in the system, including the intervener. Questions to ask include: How do I appear? How do I want to appear? What am I observing about the impact I am having? Am I checking how this aligns with my intent? What is the work I need to do to better align my intent with my impact?
• Humble leadership is leadership that places a

premium on curiosity, inquiry, and stewardship. 'Humble' does not mean 'shy', 'self-effacing' or 'lacking in confidence'. It is possible to be curious and decisive, vulnerable and sure-footed. Humble leadership requires a very deep, quiet and strong sense of Self that is readily evident in one who practices it (Schein, 2013; Brown, 2012; Block, 1993).
• Conversation: We do not put enough of a premium on the practice of real conversation in many of our organisations. It connects directly to self-awareness and humble leadership and has a great deal more to do with listening and demonstrating empathy than with a big vocabulary, clever phrasing, and public speaking.

Unpacking these practice elements, we can find these kinds of skills:

• Emotional competence: This includes the full range of self-and-social management skills (Goleman, 1998). Empathy is the uber-skill for emotional maturity. Emotional competence is at the centre of managing our own fear in the face of complexity's uncertainty, and of finding comfort in our lack of control.
• Teaming skills: Teaming is made up of several skills and behaviours like framing, creating safety, learning from failure, speaking up, etc. (Edmonson, 2012). These capabilities allow us to track short-cycled shifts in the environment, to discern emerging patterns collectively, and to notice our emotional responses to uncertainty. The iterative and cyclical nature of teaming reflects the uncertain and always-changing nature of our complex environments.
• A willingness to experiment: This means expecting not to be right the first time. It is essential to learning.
• Interaction skills: These are the building blocks of real conversation: prepare; learn the other's story; share your story; problem solve; agree. Skillful practice allows for listening intently, building trust quickly, articulating one's own experience and needs, and reaching an enhanced awareness of possibility.

SUMMARY AND REFLECTION

The more we experience and learn, the more our theory and practice needs to be updated to account for that learning. Human groups are complex systems by their very nature. Consequently, the effective path to a given outcome is often unpredictable and makes working in the dynamic flow of actual experience one of the most powerful things we can do. The present moment has the most to teach us, and it informs the choices we have available to us along the way.

Today, when we have a greater appreciation for the way individuals, groups, and organisations are dynamically interconnected, we need lenses and tools that adapt more readily to the complexity we are teaching ourselves to see. There is a lot to pay attention to. Lasting effectiveness requires resisting the seductive call of reductionism and oversimplification. This can take us away from the certainty we crave and the stability it provides.

For a long time, we have used descriptive models and structural frameworks to help us understand how to perform more effectively in our organisations. For the most part, these have led to feelings of greater certainty about where we are going and how we will get there. These frameworks have been, and continue to be, useful. And they do not fit many of the complex, disruptive circumstances in which we find ourselves today.

In these circumstances, we get stuck when we are convinced that we have to know before we decide or act. We do not have to know; we only have to be sufficiently confident and willing to pay attention to what happens when we do act. We cannot predict the best outcome; we can only see it with hindsight. This is a fundamental property of complexity. Only when we embrace this, can we truly adapt, grow, and learn.

BIOGRAPHY

Michael Ciszewski started his work life three full decades ago on Wall Street. He was an investment banker for the first ten of those years before he found the opportunity to begin working with individuals, groups, and teams as an internal OD consultant. This led to senior roles at a couple of organisations, three years based in London, and work in Europe, Africa, and Asia.

Shortly after being much too close to the collapse of the World Trade Center on September 11, Michael left New York for Washington DC. Once there, he did something he always wanted to do: he started his own OD practice.

To enhance his credentials, he earned a Masters Degree in Organization Development from AU|NTL. He is a member of NTL Institute and the OD Network. He has three beautiful and intelligent children, and a wife who says she loves him very much.

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NOTES:

1. As my colleague explains, this means that one should train with the goal of having such a degree of deep listening and harmony that one can sense the opponent's intent and move at the same time. It is equivalent to a saying in the Taiji Quan classics, "If the opponent doesn't move, I don't move. If the opponent makes the slightest move, I move first." How can one move first if the opponent has not even moved? Because one catches his intent a moment before force is issued. Thus, there appears to be zero reaction time. An opponent strikes, and I am already moving with him, so he lands on emptiness. His yang becomes my yin; it is one seamless process. In Yi Quan, as the opponent attacks, I defend and counter at the same moment. No one, two, three; only one!

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